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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,617	03/06/2002	Timothy D. Wodrich	007300-083	4973

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EXAMINER

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,617

Applicant(s)

WODRICH ET AL.

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 9-31 is/are allowed.
- 6) ☒ Claim(s) 4-6 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/24/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Allowable Subject Matter***

1. The indicated allowability of the subject matter set forth in claim 8, which has now been incorporated in claim 4, is withdrawn due to the fact that a significant number of limitations were removed from claim 4, thus making the claim significantly broader in scope. Therefore, the previously cited reference(s) to Watts, Burke, and Revankar (743) are still deemed to read on the newly broadened claim (see paragraph 5 below).

***Drawings***

2. The drawings were received on 12 October 2004. These drawings are disapproved. Simply adding reference characters to the drawings and describing those reference characters in the specification as showing the elements set forth in paragraph 2 below, does not overcome the objection below. The Watts reference shows one method of depicting an object formed of a metal having layers with a different hardness. Another method to show this would be a different cross-hatch identifying each different hardness.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the track pin bushing having a "case hardened outer surface" as set forth in claims 1-3, 26-27, and 31; and the track pin bushing having a "carburized surface" as set forth in claims 9, 16, and 22, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 4-6, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Burke and in further view of Revankar ('743). Watts shows a track pin bushing 10 having first and second ends (24 & 26), an inner surface

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28 with an inner diameter, and an outer surface 12 having a varying diameter. The outer surface 12 has a first outer diameter at a first end section 32 and a second end section 34, and a second outer diameter at a middle section 38. The inner diameter defines the circumference of an axial bore, which extends from the first end 24 to the second end 26. The second outer diameter is greater than the first outer diameter. The bushing 10 is an iron-based alloy, with the outer surface 12 and a portion of the inner surface being case-hardened.

Watts does not show the middle section of the bushing including an annular groove that extends over the majority of the axial length of the middle section; nor does Watts show a wear-resistant coating disposed in the annular groove and metallurgically bonded thereto, the coating being a fused metal alloy of at least 60% iron, cobalt, nickel or alloys thereof.

Burke teaches the use of a track pin 15 having a machined groove that extends over the majority of a middle section of the outer surface of the pin 15, and in which a wear-resistant coating 18 is metallurgically bonded. The wear-resistant coating 18 has an outer surface that is flush with the outer surface of the pin 15.

Burke does not show the wear-resistant coating being formed from a fused metal alloy of at least 60% iron, cobalt, nickel or alloys thereof. Revankar teaches the use of a wear-resistant coating which is formed from a fused metal alloy of at least 60% iron, cobalt, nickel or alloys thereof. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the wear-resistant

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coating of Burke from the fused metal alloy as taught by Revankar as a substitution of equivalent wear-resistant materials, dependent upon availability, cost, and characteristics required for the application in which the pin will be used.

Therefore from these teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the case-hardened outer surface of the bushing of Watts with the wear-resistant coating bonded into a groove on the outer surface as taught by Burke as modified by Revankar, as an alternate and equivalent configuration, for the purpose of allowing the use of a variety of different coating materials dependent upon the environment and/or properties required.

Watts as modified by Burke and Revankar do not specify that the wear resistant coating has a thickness of approximately 1.5mm. However, one of ordinary skill in the art at the time of the invention would have found it obvious to provide the wear resistant coating with a thickness sufficient to allow the track pin bushing to function in working conditions without the need for frequent replacement, thus increasing the operating life of the track pin bushing to reduce maintenance costs.

***Allowable Subject Matter***

6. Claims 1-3, and 9-31 have been found to be allowable over the prior art.

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7. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim *and any intervening claims*.

### ***Response to Arguments***

8. Applicant's arguments filed 12 October 2004 have been fully considered but they are not persuasive. The allowability of the subject matter of claim 8 has been withdrawn for the reasons set forth in paragraphs 1 and 5 above.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger  
Examiner  
Art Unit 3617

  
jrb

  
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